

# THE MINING AND METALLURGICAL JOURNAL.

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LOS ANGELES, CAL., JULY 1, 1896

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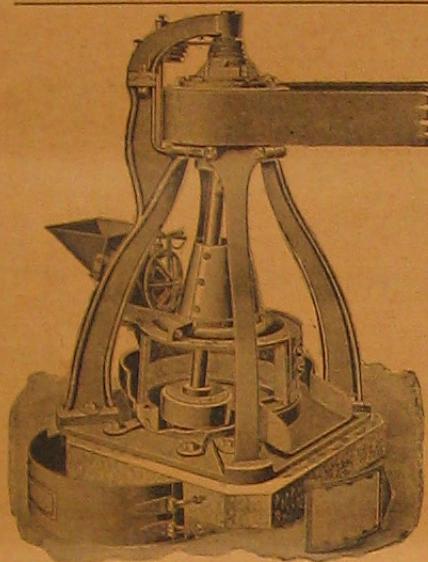
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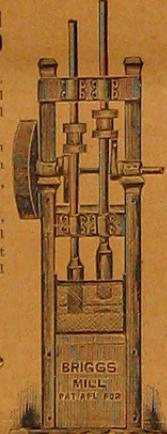
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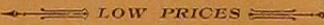
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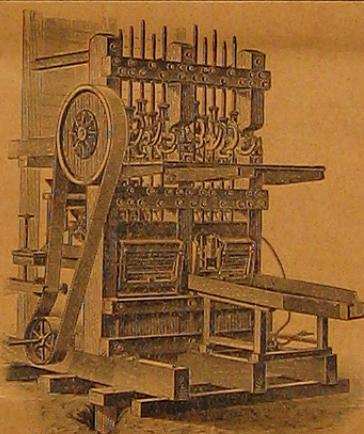
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## LIMITED COINAGE.

A great fear is expressed that unlimited coinage will cause the silver of the world to be dumped upon us, and consequently there are many who favor confining coinage in this country to the American product. Even with this no doubt there would be so much stimulation given to mining that the American production would soon reach 75,000,000 ounces per annum. Deducting that which is employed in the arts and manufactures the sum for coinage might reach \$40,000 annually. This would help materially toward making a sufficiency of the circulating medium. It might be all that is necessary for the expansion of the volume of basic or redemption money.

To confine coinage to the American product would necessitate the imposition of very high duties on foreign silver and silver-bearing ores, duties so high as to be quite prohibitory, for in no other way could the foreign product be kept out. Indeed, it would be difficult anyway, as there would be so much value in a small quantity of silver that smuggling, and especially over the long and unguarded line between us and Mexico, would be very great. Another consideration must not be lost to sight, and it is that restriction of coinage to our own product would embarrass trade with silver-producing countries, and especially Mexico, with which our commerce has become large, and is destined through natural causes, if they are not interfered with, to be immensely increased.

The danger that silver will be dumped on us to a burdensome extent in case unlimited coinage is resorted to, is more imaginary than real. The world must have silver in the arts and mechanics, and for subsidiary coinage. In these respects consumption will not decrease; in fact, there will be an increase of subsidiary coinage. It is more than probable, indeed, it is a moral certainty that should we remonetize silver, other nations will follow

our example. A combination of silver nations will force the fullest monetary use of silver by the leading commercial countries of Europe. The use of silver as a money metal is not an experiment. It has been tried as far back as we have historical knowledge, and no one has yet been able to point out any evil that has resulted from it. Silver was never demonetized because of any harm that followed its monetary use, but simply for the reason that it interfered with the profits that the gold possessors desired to make upon their holdings. The adoption of the single gold standard rendered the process of fleecing the masses more simple and easy.

## CONGRESS ADJOURNED.

Nobody regrets the early adjournment of Congress. It has passed the usual appropriation bills, a number of pension bills, a concurrent resolution advising recognition of Cuban belligerency, and that is about all it has done. Certainly nothing has been accomplished towards relieving the country of the condition of distress that has existed for several years, and has been growing worse as time has advanced. No law has been enacted on finance, industry or commerce, nothing done that will tend to afford more employment to our idle people.

The situation has been such as to forbid that anything should be done under our practices. This country has fallen into the theory that party interest is greater than the public. The House of Representatives is republican, the Senate is not controlled by any party, and the President is democratic. There is no concordance of views on the part of any two of the law-making branches of government, hence it became impossible to accomplish much of value, because patriotism is subordinate to partizanism. None of the leaders on either side was willing to have that done which would redound to the credit of an antagonistic party. If patriotism were paramount in controlling public officials there would be less need of selecting partizans to carry out policies favorable to the public interests.

The Congress which came in December and has just gone has taught a lesson, and it is that if anything of value is to be done, it must be through domination of all branches of government by one and the same party. We are a government by party, and not strictly by the people. It is to be hoped that in the coming election the government will fall into the hands of some party that will have nerve to do something of a positive character. No condition can be more unsatisfactory than the one now existing, for no party or set of men feel that they are responsible for what is or is not done.

## A SILLY OBJECTION.

The goldites say that free silver coinage will chiefly benefit the mine and bullion owners, and through this they hope to arouse a prejudice in the minds of those who have a fear of monopolies and trusts.

The fact should be borne in mind that the silver mines in the country in the main are held by the same parties who owned them when silver was demonetized. To remonetize silver would be doing them simple justice. It is true the owners of silver mines would be benefitted. At the present prices of silver very few mines can be worked without loss. To enable the owners to resume work and pay good wages and realize a profit would not be

calamitous to the country. The silver mining interest is of sufficient importance to receive some consideration in the way of encouragement. To produce forty or fifty million dollars a year is no small item for the country. Revival of the mining industry would stimulate other enterprises, especially if that revival results in providing an enlargement of the volume of money.

We have repeatedly said that the great argument in favor of free coinage of silver is to supply more money to the country. There cannot be enterprise to a great extent without more money, and without a larger volume industrial and commercial development will be but trivial, whatever may be the policy on other subjects. Means must be devised to give employment to our idle people. No country can be prosperous when any considerable portion of its population is idle. To supply a sufficiency of circulating medium is the first and highest duty of government. Silver coinage is a long step in that direction, and it may prove to be all that is necessary. In financial legislation the controlling consideration is benefits to the masses and not profits to bankers and money lenders.

## THE ST. LOUIS PLATFORM.

Whatever may be its qualities in other respects it certainly has the merit of being explicit and unmistakable on the money question. It is emphatically for the gold standard. So far as the Republican party is concerned there is no straddle, and it has squarely presented the gold standard as its doctrine.

What will be done by the Democratic National Convention for the time being is conjectural. It, however, appears quite certain that it will declare for silver coinage and the double standard. There may be attempts to straddle the question, and should that step be taken neither wing of the party will be satisfied and the party will go into the campaign with doubt and lukewarmness existing on all sides. If it declares for silver the goldites will bolt, and if for gold the silverites will bolt.

There will be a new party composed of elements from all the existing political organizations, which will declare unequivocally for silver. What position it will take upon the tariff question is problematical. If for protection silver Democrats will hardly join it, and if against protection few Republicans will join it. There need be no mistaking the fact that among Republicans at least the tariff question is regarded as of very great importance, and silver Republicans believe that protection and free silver coinage are twin measures, and that the alliance between gold and protection is unnatural, and that linking goldism with protection impairs the value of protection in a great measure. A policy that assures balances of trade in our favor is of itself a financial benefit, as it prevents the outflow of gold from this country and causes an inflow from other nations.

If the Democratic free silver men are in the majority in the National Convention it is improbable that they will form a union with other elements except upon the basis that their nominees shall be accepted as the standard bearers. Nor will they consent to an endorsement of the protective principle in tariff legislation, and on that account it can hardly be expected that Republicans in any considerable number will leave their party and sacrifice the protective policy. If protection and gold were presented on one side,

and protection and the double standard on the other, it seems inevitable to us that the latter would sweep the country. Otherwise it is altogether probable that protection and goldism will prevail. We shall await the coming of the 22nd of July with interest and anxiety.

#### CALIFORNIA BULLION OUTPUT.

"The bullion product of California in 1895 was \$15,334,000 gold, as against \$599,000 silver, yet the free silverites persist in putting California in the silver column."

The above is a mild example of the ignorant or prejudiced remarks of the Los Angeles *Times*, but thanks to the intelligence of our citizens, which is not reflected in the obscured and darkened light of the *Times Mirror*, but in the adoption by both Republican and Democratic State Conventions, of a solid silver resolution in favor of free coinage of silver. The *Times* was a few years ago in favor of silver, but for some unexplained cause adopted the single gold standard of Europe, in place of protection to an important local, and most extensive American industry, i. e., silver mining. Of the above amount of \$599,789 of silver produced in this State during 1895, only \$142,835 was produced in the northern counties, and Southern California produced by counties as follows:

Inyo.....	\$188,329.23
Kern.....	46,064.28
Riverside.....	2,550.00
San Ber'do.....	219,410.30
San Diego.....	600.00

Southern California Total.....\$456,953.81

These counties are all tributary to Los Angeles, and from here receive their supplies.

Silver mining is therefore a local industry, carried on in spite of the free-trade hard *Times*, and to repeat the fact, in these pages, is a chestnut to all the miners in these counties, but for the editor of the *Times* and a few other newspapers it is necessary. The *Times'* election cries are patriotism and protection, but the idea of encouraging the local industry of selling our silver dollars to Europe as soon as coined at a three per cent premium, as we did prior to 1873, and by protecting it against the "free trade" in silver bars to Europe, by imposing a prohibitive export duty on silver in all forms except coin, is the protection required. To accomplish this end and protect our silver mines, our Republican friends will have an opportunity to show their patriotism and diplomacy (if the present Democratic government fails) in negotiating treaties with other North and South American countries, to prohibit the export of silver except as coin, minted by each country at a fixed ratio of, say, 16 to 1.

As these countries supply over three-quarters of the world's production of silver, this action would bring silver back to its old value of \$1.29.29 an ounce, and prevent our Southern California miners being robbed of \$500,000 or more a year. To the *Times* this is a small local matter of no patriotic importance, compared with the "golden Anglomania" of the warhorse editor of the Los Angeles *Times*, except when Monroe doctrine has to be talked, in the interests of some far-off South American gold mining territory which England desires, but to the miners of Southern California it means at present over one million dollars, and with smelting works in Los Angeles it means several millions.

#### THE COMING VEHICLE.

The motor carriages thus far constructed, with a few exceptions, have been designed for passenger uses and not for mercantile purposes or heavy haulage. This is natural enough in the infancy of their development, but at the same time it should be borne in mind that the greatest utility will be found in other directions. The experiments that have been made show conclusively that a new era of transportation is fast approaching and one which will introduce some wonderful changes in our daily life. Again, but with greater emphasis, will the history of the bicycle repeat itself. Enormous manufacturing plants will spring up, and those who wisely venture first will mould its destinies.

The public have not as yet a very clear idea as to what the Motor Vehicle will accomplish, or what will be accomplished by it. The belief is becoming general among eastern carriage builders that it will find a wide field of use at once, and that in its construction under the various patterns that will be necessary, they will find a widening avenue for employment of factory capacity. Tool, engine and machinery makers believe it will afford them additional work.

The answer to the question involved in the above comments is to be found in the new conditions which have grown about us during the past twenty or thirty years. Prior to a generation or so ago, there was very little distance between home and shop or office. Now there are great distances.

In this fact and condition is found the reason for the coming of the "horseless vehicle," when in primitive days the shop was down stairs and the home upstairs or around the corner the question of *quick* or *slow* did not arise. Now when homes and places of employment are separated by miles of travel, when time is money, when comfort is at a premium and luxury an absolute requirement of the masses, the question of getting to and fro and of going when and where we wish is an important one, as also is the attendant question how our petty daily needs of life can be most expeditiously met.

#### SOMETHING MORE NEEDED.

The trolley car in its way, the light carriage in its way, and the light delivery and express wagon in its way, all help out in a manner. But today in the fever of business struggles, something more is needed. The locomotive and its train weighing 500 tons must be taken from their track and reduced in size to a few feet, reduced in weight to a quarter ton, and made to accommodate two or four persons instead of two or four hundred.

That is the problem before us in the "horseless vehicle." Logically, it is a steamless locomotive, derailed and adapted to the street or road. Every man his own locomotive about expresses it.

It is not that we are leaving the horse altogether, but that we are re-adapting the locomotive to everyday use. This is the logic and philosophy of the movement. It is simply a case of decentralizing power, and incidentally to a degree displacing the horse.

There are an immense number of utilities and services to be rendered to society and by society to itself through this transformation of the locomotive and its train into a little engine without a train, erroneously termed a vehicle, simply because it supplants what a horse has heretofore hauled. But let us accept the name. What is its field? Its field is to do in ten thousand small ways what has

been done heretofore on rails in one large way. Its purpose is to develop a thousand small utilities and render a thousand small services where one was rendered before, in a wholesale way. It will open and develop its own field of uses, and these uses have arisen to multifold dimensions only since the factory, the counting-room and store have been separated from the homes of the millions by long distances. This, as stated before, is one reason of its being, of its coming, and its use will be measured and defined by the volume of needs created by the separation of shop and home. It is not intended to convey the meaning that its use is to be confined to going from shop to home, but these terms are used in a higher sense to define scope and function. We need the locomotive for a thousand uses that it cannot serve as long as it can run only on sixty or ninety-pound rails and weigh fifty or a hundred tons. We need locomotives that will weigh a quarter or half ton, cost \$250 to \$1,000, hold one, two or four people, cost a cent or two an hour to run, go when we are ready and stop when we say stop.

Its field, it is therefore to be seen, is commensurate with the great prototype. The new engine will come and penetrate into our daily life and serve thousands of uses and do our bidding with a thousand ways. Its future is as broad and great as our expanding wants, and its production is destined to become an important industry.

Its importance to the mining districts situated remote from railways will be appreciated when it is considered or known that the proper facilities of transportation often, it may be said in nearly every instance, make successful mining possible, and without which many losses are incurred which under favorable circumstances would be turned to a profit. It enters into the question of successfully operating more mines than any one cause, for it enters largely into them all. It is not the purpose of this article to deal with the subject in all its phases, but to point out some of the most important ones in relation to mining and to show wherein a great improvement will soon be made in the existing order of things.

Where no means of transportation are afforded except by packing loads on the backs of animals for any distance, the opportunities for improvement are obviously small. There are instances in almost every part of the mining country where two separate and equally rich and extensive districts are, by reason of the difference in transportation facilities, as unlike in productiveness and prosperity as can be imagined. The reader can readily call to mind such instances. The one may be equipped with competing lines of railroad, tendering low rates on the ore tonnage, while the other may have no railroad at all or be entered by but a single line, whose rates are extortionate, or one may have good roads entering it, making it possible to haul large loads of ore to the railroad or boat landing at a comparatively low cost, while the other may have but indifferent roads with corresponding high cost of haulage.

A difference of \$1 per ton for freight frequently decides the operation or closing of a mine. Many districts now struggling along, the miners in which do their annual assessment work and no more, might, under favorable conditions, be made thrifty communities by proper transportation facilities. This is especially true of all this southwestern or arid portion of the United States, where the cost of animal transportation is such as to prohibit generally successful mining. The character of the vast ore bodies found in the above

named region is so varied that it is impossible to treat them by any process or in any one place; hence transportation is the one matter of vital interest to all directly or indirectly engaged in extracting the precious metals from the ground.

Ore which will pay a handsome profit in one district cannot be successfully mined in another; and this is frequently determined by transportation alone. This is especially the case in districts where the ore is low grade, and if half the freight charges could be saved it would yield a handsome profit to the investor. Transportation is a matter of such importance that it means the life or death of a camp situated as most all of this southwestern country are, with only one railroad penetrating a district of several hundred miles. Fortunately these conditions will soon be changed.

(To be Continued.)

## CORRESPONDENCE

### ARIZONA.

ORO BLANCO ARIZONA, June 10, '96.

**EDITOR JOURNAL:**—The present line of business in this camp seems to be the improvement of mills.

The Old Glory is putting in 30 stamps, to replace the Griffin mills.

The Oro and Julia Company is putting in Vanner concentrators.

The Montana Company is still at work on tests of its tailings by cyanide process, with, as I understand, good success, thus far.

The Tres Amigos mill is shut down at present, for lack of water, after a very satisfactory run. The ore looks well.

The Golden Eagle mill is running.

Old Oro Blanco, Sorrel Top, Gold Bug, and Grub Stake—work on each of these properties is progressing with continued favorable results.

C. W. KEMPTON.

### FRESNO.

FRESNO, CAL., June 18th, 1896.

**EDITOR JOURNAL:**—You have no doubt given up hearing from me again, but I trust you will pardon my long silence.

Mining and mining interests are receiving somewhat of a boom in this section at present although considerable attention is being drawn to the western part of the country, known as the California district, by recent discoveries of oil and coal.

Several new companies have recently been organized for the development of these wells and mines and a great deal of capital is being invested. It is claimed by the owners of these properties that the oil produced here is much purer, therefore much more valuable, than that produced in the southern part of the state. The first shipment—one carload—was made two weeks ago.

Two mining companies have recently been formed and incorporated here. The Tuolumne County Mining and Development Company was organized and incorporated January 9th of the present year, with a capital stock of \$48,000, divided into 2,000 shares. The plan of the company is as follows: Capital stock \$48,000, divided into 2,000 shares at a par value of \$24 per share, payable in monthly installments of \$1 per month. It is proposed to use \$1,000 per month as a working capital with which to bond and develop mines until one or more good mines are discovered and acquired by the stockholders of the company, then to

work them steadily to the interests of all concerned.

The company recently bonded the Zion gold mine, located near Groveland, Tuolumne county, and are actively engaged in developing the property. They have also secured the extension to the Zion and two properties considered equally as good just across a gulch from the main property.

The officers of this company are: N. W. Moody, president; Thos. R. Brown, vice-president; J. L. Marble, secretary, and Fresno National Bank, treasurer, who together with Jay Scott constitute the board of directors. I will also state that all the stock of this company is sold and is now off of the market.

The Knob Hill Gold Mining, Milling and Development Company was organized and incorporated at Fresno, May 16th, with a capital stock of \$50,000, of which \$30,000 is subscribed and fully paid up. Its plan is practically the same as that of the Tuolumne County Company, which, by the way, has its principal place of business here. This company owns the Knob Hill mine, situated in Auberry Valley, Fresno county, where they have a 5-stamp mill in operation at present, and the crushing of ore is now going on with favorable results. The vein yields free milling ore, somewhat decomposed, that goes from \$20 to \$25 per ton.

The incorporators of the company are: J. H. Hall, W. H. Cavin, S. B. Holeton, T. S. Price, Geo. Rouse, Ellen Holeton, H. C. B. Gill and J. W. Shanklin.

About eight hundred shares of this company will be placed on the market for investors.

I hope in a later communication to give you a complete description of the Minaret Iron Mines, the largest known body of iron ore in the world. The property is under bond for \$1,500,000, and as soon as the surveys are finished active development will commence.

R. E. GALLOWAY.

### CALIFORNIA

SAN DIEGO, CAL., June 18th, 1896.

**EDITOR JOURNAL:**—The mining district adjacent to Dulgura is at present producing some very encouraging prospects. One of the largest porphyry dykes, carrying mineralized quartz, in Southern California, traverses this section, and the indications are very favorable for the development of a number of mines.

Los Angeles parties who have been examining the sulphuret mines at Cajon Peak returned yesterday and are well pleased with the properties examined. They expect to invest heavily in a number of the prospects and will sink a number of shafts to determine the extent and value of the ledges.

Dr. Montague Yates is sinking a double compartment shaft on his claim in the Lagunas. It is down twenty-five feet, and will be continued to a depth of 100 feet. The doctor does not believe in shallow prospect holes, and if there is anything in that section of country he will try to find it.

Good reports continue from the Piedad mine at Jacilites, of which G. H. Hayes is superintendent. The five stamp mill recently erected is giving good satisfaction.

It is reported that the mines owned by the Venturiana Mining Company, of this city, are looking well and that recent developments show better prospects than for some time past.

From a gentleman who has recently returned from the Rice district it is learned that

the prospects are exceptionally good in a few of the claims in that district. While there are no coined "twenties" lying around loose it is probable that a few good mines will be developed.

The Ramona *Sentinel* reports that D. W. Zortman and James Jennings, miners at work on the Hubbard mine at Banner, have filed a miner's lien against the property to recover their wages. The work was done for Messrs. Crouch and Cardell, lessees of the mine from Messrs. Hazzard & McDowell.

The twenty stamp mill of the Calmali Mining Company has been hung up until such time as new ore bodies can be developed. The recent management, instead of keeping a force at work opening new ground, made the mistake of stopping out all the ore in sight and discontinued prospect work. Hence the present shut down.

The Fortuna Mining Company, who have a number of claims at Aqua Dulce, have re-incorporated under the laws of Mexico. The officers are: Gay Lombard, president; B. L. Harding, vice-president; W. H. Dale of Salt Lake, treasurer and secretary. The company have been doing large amount of prospecting and development work in the past year and reports from their mines are favorable.

The many friends of L. N. Bailey will be pleased to learn that "Newt" has struck it rich in the Kentuck S. In cleaning out the old tunnel and about two feet in from the breast, where work had been discontinued over twenty years ago, a ledge was struck about eighteen inches wide, which will run into the hundreds of dollars per ton. The ledge, where it was cut by the crosscut tunnel, shows up as good an average ore as has heretofore been struck in the camp (Banner.) Mr. Bailey has never lost faith in the mine and has kept up his assessments for nearly a quarter of a century. The Kentuck S. is favorably located for economical working, and Mr. Bailey will push developments to determine the extent of the ore body encountered.

A number of prospects are being developed in the Lyons Peak district.

The Ready Relief mill made a number of small crushings for "chloriders" the past week.

Fred Grand has leased his claim to George A. Case, who will endeavor to locate an ore body and develop it.

E. D. Switzer is engaged in placing the 10-stamp mill of the Owens Mining Company in condition to commence crushing ore. The drift on the 350-foot level exposes a very fair body of high grade ore. L. E. AUBURY, E. M.

Articles of incorporation of the Brown-Blake Gold Company were filed with the county recorder for record at Prescott, Ariz., with A. C. Dake, W. B. Palmer and Frank Evans as incorporators, June 4th. The principal place of transacting the business of the company is at Prescott, with a branch office in Denver and such other places as the company may deem proper. They will not only own, operate and lease mines but will own, operate and lease railroads, railroad bridges, toll roads, toll bridges, canals for navigation, water power, irrigation, mining and other properties. The authorized capital stock is one million five hundred thousand dollars (\$1,500,000), divided into as many shares of one dollar (\$1.00) each, and is to be non-assessable; liabilities are limited to \$100,000. The corporation will exist for twenty-five years from the 10th of June, 1896.

## Miscellaneous Mining News.

### ARIZONA.

Leo Goldsmith and ex-Surveyor General Manning, who have just returned to Tucson from their mines in Sonora, report a scarcity of water. Their mines, however, are looking well and as soon as sufficient water is developed work will go on steadily. Boring for water will commence at once.

C. E. Taylor, of Globe, is developing the Monarch, Native Copper and Mineral Creek claims, located in Mineral Creek, Pinal county, of which he is the fortunate owner. These claims are about one-half of a mile north of the famous Ray property, and are very promising indeed. They contain a great deal of native copper. The ore cannot be smelted to advantage, but is concentrated with profit. The three claims are bonded to Denver parties at present.

The owners are busily taking out ore from the La Fortuna mine in the Gila Mountains, but the mill was closed down for repairs about the 11th ult., it is, however, running now. Hon. Robert M. Strauss is the superintendent, and is a very affable gentleman. He is unassuming, but is all business. He and his men understand each other and the work goes on without excitement or friction. The company is building a reservoir on the mountain side with a capacity of 100,000 gallons. The pump station is situated some two miles on the Yuma side of Blaisdell station. A new well has just been completed, the water passing into it through a seventy mesh screen.

### Jerome Mines Sold.

It is rumored that the United Verde copper mines at Jerome, owned by W. A. Clark, the Montana millionaire, have been sold to a French syndicate for \$50,000,000. Mr. Clark left Jerome a few days ago for Montana and it is impossible to verify the report.

A. L. Butler and his partner had eighteen and one-half tons of ore from their Jessie R. mine, in Cherry creek district, near Prescott, worked at Sines' mill recently, obtaining forty two ounces in gold and concentrates valued at \$80. They will continue work on the claim.

Feeney & Ruiz ore from the Cross Fraction, near Kingman, sampled over 1,500 ounces in silver per ton and five ounces in gold per ton. Their lease will be up the 1st of July, and Cal Cross will work the mine himself.

J. E. Bruce was in Kingman with a small lot of gold and silver ore from his and Geo. Eaton's mine in Gold Basin as a test. The ore averages about six ounces gold per ton and runs well in the white metal. It is called the Utica mine and it has the geographical marks of rivalling its famous namesake.

The United Globe mines at Globe, probably better known as the Buffalo, are carried on under the efficient superintendence of Mr. E. H. Cook, a pleasant, unassuming young gentleman, who is a thorough miner and fully alive to the responsibilities of his position. There is at present one 36-inch furnace at

work on this property, and it has been in constant operation since January 1st. On the 1st of August the capacity of the works will be increased by the addition of a 150-ton stack. The company now owns about forty claims, the principal ones being embraced in the Buffalo and Hoosier groups. The Transit, Hoosier, Gladiator and Grey are all connected by underground workings, as are also the Buffalo, Mark Twain, Cuyuhoga and Cleveland. Tramways for transporting the ore from the mines to the smelters will soon be placed in position. One hundred and fifty men are employed in the mines and smelter. The ore worked by this company is low grade, but the reduced price of coke which will be still cheaper as soon as the railroad is completed enables it to be hauled at a handsome profit to the owners.

Recently Jas. A. Fleming and Dr. Ford, of Phoenix, bonded the Black Copper group of mines near Globe for \$250,000, and will at once put up machinery for working the ore. It is estimated that one of the claims is worth half a million dollars and will produce that amount the first year. The ore will be treated by the leaching process, as it is better adapted to this class of minerals.

The Etta mill, on the Verde river north of Prescott, has closed down, pending the erection of a 20-stamp quick drop mill, with all the latest improvements in free gold milling and concentrating—Deadwood gold mortars and 6-foot Frue Vanners. The water of Oak creek will be piped under the Verde river to furnish power. The length of the pipe line will be one and one-half miles. This, with a Pelton wheel under a 40-foot head, will give sufficient power to run 1,000 stamps.

John S. Ross is working a claim in Copper Basin, near Prescott, owned by R. C. McNary, which is very promising.

Geo. Waddell and partner are having about two or three tons of ore from their new claim near the Sunny South mine packed into the sampling works at Prescott for shipment. If the returns prove as good as they have every reason to believe they will, from the assays they have had taken, they will become regular shippers.

Mr. Bullock, who is interested in the Mammoth mine in the Bradshaw mountains, has decided to expend some money in the development of that property. As is pretty generally known this ledge is 150 feet wide, and samples of ore from it gave a value of over \$9 per ton in gold besides some copper. It is too big a proposition for a poor man to tackle with any reasonable hopes of success, but offers splendid inducements to a big company which would not be afraid to spend some money in opening it up. Mr. Bullock has succeeded in getting some wealthy mining men of California interested in it, hence work will be commenced at once. If with development it shows up in proportion to surface indications it will turn out to be one of the biggest properties in Arizona.—*Journal Miner.*

Hughey Hughes and Geo. Burton have given a bond on some mining property owned by them on Groom creek, south of Prescott, to eastern capitalists. A steam hoist has been sent out, and the property will be worked for all that it is worth.

From a new location two and one-half miles west of Thumb Butte, near Prescott, upon which a 30-foot shaft has been sunk, there is an ore body four feet between walls, carrying a 12-inch pay streak of gold ore which runs as high as \$125 per ton. The ore body averages \$40 per ton and is widening with depth.

At the Kasser Gold Mining Company's camp, Lost gulch, near Globe, the pipe line, about a mile in length, has been completed and the mill is now running. Water was struck in the shaft last week at a depth of eighty feet below the fourth level. The character of the ore changes at the water level to sulphurites and pyrites and shows an increased percentage of gold. Machinery for hoisting water will be put in at an early date. Development work in the mine will be pushed and the mill will be kept running.

The *Phoenix Herald* speaking of one of the prominent mining properties of Yavapai county says: The work on the Planet, beginning on the west end, consists of a shaft 145 feet sunk on the ledge. The ledge increased in width from the top and at the bottom is three feet. At the bottom of this 145-foot shaft two drifts were run 80 feet east and west. The drifts encountered the ledge four feet wide. The next shaft to the east side is also on the ledge at a dept of 295 feet. The 80 foot drift from the 145 foot shaft on the west enters this shaft. A steam hoist is operating in this 295-foot shaft. The main shaft is sunk on the dividing line of the two claims and is down 430 feet. No better timbering and facilities for handling the ores can be found. A break occurred in the main shaft at a depth of 200 feet, but at a cross cut of 100 feet the ore body was struck. On the Saturn, 300 feet east, a shaft is down 195 feet in the ledge. The ledge at this point does not vary from that of the west end of the Planet. At a depth of 175 feet a level of 300 feet was run, connecting with the main shaft. A winze was sunk in the center of this level 70 feet, and in the face of the winze there is a ledge of over five feet. The ledge is oxidized to a depth of 80 feet. The vein runs northeast and southwest and lies between granite walls. The mines are located above the gulch high enough to erect a mill. The mill will be convenient to the mines. Superintendent Clark thinks he has developed a good supply of water for all purposes. One of Sturtevant's blowers furnishes air in the mine through a 12-inch pipe. Hot and cold water is in the change room adjoining the engine house at the main hoist. The company's building are built on a flat below the mine. The house for the company consists of three rooms and an office, with a porch, and well furnished. A small adjunct received Mr. Clark's particular care, and was built as a special favor for the president of the company. It is highly polished and varnished inside. It is not only beautiful, but useful.

### SHUT DOWN AT GLOBE.

The expected has happened. As a result of the precipitated and intemperate action of some of the miners on the night of June 1, in compelling Superintendent Parnall, by threats of personal violence, to accede to their demands, which were deemed unreasonable, an order was received by telegraph Tuesday night, June the 9th, from the office of the company at Boston, directing Superintendent Parnall to shut down the mine and smelter and pay off

at once. Instructions were promptly obeyed; all work in the mine was suspended at 3 o'clock a. m., and the furnace blown out at 7 o'clock a. m. on Wednesday. Only four men are retained at the mine to keep the pump in operation. Wood contracts have been suspended, and the saw mill will, in all likelihood, be closed down within a day or two. Coke hauling will probably continue until all coke now in transit has been delivered here.

Superintendent Parnall has no information of the company's intention further than the brief instructions contained in the telegram referred to, and while expressing regret at the turn affairs have taken, declines to hazard an opinion as to the duration of the shutdown. However, the general impression is—and appears to have some foundation—that the suspension will continue for sometime, probably for several months, and that when work is resumed it will be confined to development of the mine.

Public sentiment seems to have undergone a great change during the past week, and especially since the people who have direct interest in the welfare of Globe have come to realize the possibility of a long-continued suspension and the disastrous effect which it must have upon every business interest, as well as the tendency to discourage the investment of capital in other mining enterprises.—*Globe Silver Belt.*

Most flattering reports continue to come from the Johnson-Fitts mine on Tomlinson Hill, at Pearce. The recent strike of an ore chute holds out remarkably well in width and extent, five feet thus far shown and assays ranging from 80 to 150 ounces silver and carrying also some gold. Horn silver can plainly be seen impregnated throughout the ore and the ledge runs almost perpendicular. This claim will open another opportunity for some company to make a fortune as nearly 175 feet of work a big ore body has been developed showing that this hill also lays claims to being a bonanza.

#### DOS CABEZOS.

The Casey Brothers have made a discovery that settles the question of depth to the Dos Cabezos mines. They have struck a vein of high grade ore over twelve feet wide and apparently widening on the east drift of the 200 feet level. They had run a drift just above the lode and then sunk a winze with the above result. There is no doubt in the minds of those who have inspected the work that a bonanza is in sight.

There are many claims along the big ledge that are being developed and showing up the merits of this section.

The Wangthal mill is yielding handsome returns to its owners while many others are demonstrating the fact that Dos Cabezos is a leading gold country and will some day command attention.

The big Dos Cabezos ledge that runs along the range for miles, and can be seen 20 miles distant is seamed with hundreds of small rich veins, while the big dyke itself will average about \$8 or \$10 per ton.

#### TOMBSTONE DISTRICT.

Messrs. Langpaap and Dunker who have been associated with Messrs. Dorsey, York and Cavanaugh in the cyaniding of the Grand Central dumps for the past two years and six months, have sold out their interest to the three latter partners.

Messrs. Langpaap and Dunker having secured a lease on the Silver Thread and North Point mines belonging to the Grand Central, are making preparations and arrangements to work both the mines and cyanide the ore on an extensive scale. A hoisting machine is to be erected to hoist from the Silver Thread and a cyanide plant erected nearby for the treatment of the ores.

It was also learned that the Telephone mine, which has ranked as a producer and a veritable mint to its owners in early days, and which has lain idle for many years, for various reasons, had been leased and is soon to be worked. The ore of this property is high grade manganese.

There has also been negotiations quietly pending for the leasing of another prominent mine in this district, which, if terminate successfully, will be of importance as the owners have refused constantly to consider any proposition to chloride the same because of a probability of working the mine themselves.—*Prospector.*

The company at Duquesne is shipping a large amount of ore to Crittenden and thence to El Paso to the company's smelter there. There is a steady stream of ore wagons on the road continually and the mine is being worked night and day. A large number of Mexicans are being employed there.

#### CALIFORNIA.

##### KERN COUNTY.

###### Heald Mining District.

D. R. Payne and son, of Los Angeles, are camped there, prospecting and doing assessment work on a claim which they are interested in.

Mr. Dye and a party of friends from Bakersfield have struck a rich deposit of gold on an extension of the Heald ledge. This famous ledge runs from the Sandstone at the foot of Black Mountain to Cow Wells, a distance of 25,000 feet, and is easily traced by the hanging and foot walls which are 600 feet apart.

The mill at Mosquito Spring has not been able to crush any ore as yet on account of the gasoline engine refusing to do the work.

Ed Harrington, of Tehachapi, has recorded a placer claim in Nugget gulch and is taking out good pay.

J. B. Clifton and S. Phillips have discovered and located a ledge of galena quartz half way between here and Cow Wells, which looks well and carries both gold and silver.

F. H. Heald has ten tons of ore at the Mosquito mill and has let a contract to have 100 tons mined, to be milled at Kane Springs.

John Clark, of the Mosquito mill, is in Los Angeles this week on business.

Mr. Smith and a party from Pomona are prospecting in the vicinity this week.

A water project for Randsburg is said to be on the program. With plenty of water—cheap—Randsburg would turn out immense amounts of the yellow metal.

The new postoffices of Garlock and Randsburg are now a fact.

Considerable rich ore has been stolen from the mines at Randsburg, in Kern county. The thieves stole a wagonload of ore and it is supposed they are taking it to an arastrae in the hills.

A report says that the gold miners on Pah Ute mountain are greatly excited over the discovery of an 84-foot ledge of gold-bearing quartz near or adjacent to the famous Bright Star mine.

Mr. Fitzgerald is turning out several tons of ore every day and has a good showing, and he has two eight animal teams hauling the ore to Keeler.

The Snow Canyon mill, near Keeler, will close down shortly for the summer on account of the heat and short supply of gasoline.

The mining situation at Cerro Gordo is improving and at least twenty or twenty-five men are working there at present.

Thomas Jaggers was in Mojave from Red Rock June 23d with a nugget weighing \$590. The sight of the yellow metal has stampeded the inhabitants and all Mojave has gone to the mines. The find has created the greatest excitement Mojave has ever known.

#### LOS ANGELES COUNTY.

J. M. Pearson is getting everything in shape to begin mining and milling on a large scale at Acton. Everybody is busy up there, and Mr. P. will have left for San Francisco by this time to get the balance of machinery needed.

Considerable mining machinery is being unloaded at the Acton depot now, and it is a sure sign of lots of life among the many mines thereabout.

#### RIVERSIDE COUNTY.

H. L. Ryan, of the Lost Horse Mining & Milling Company, was in Los Angeles the 22nd ult. Mr. Ryan showed us some bullion that came from the Lost Horse mine, about sixty-eight miles from Banning. From a twenty-one days' run of ten hours a day, with a 2-stamp mill of 750 pound stamps, they made a clean-up of about \$2,600.

J. Irving Crowell, H. E. Cunningham and George Branch have filed a location on 400 inches of water, in Cold Water canon, near Temescal, at an elevation of 6000 feet above Glen Ivy hotel. A dam is to be constructed in the hills and the water used to generate electricity, which will be conveyed to South Riverside and used as power for a 30-stamp mill, which the locators propose putting in there for crushing ore from several mines which the gentlemen have located in the same range of hills.

#### More Mining Locations.

The Riverside *Press* says that the Court-house people appear to be going into the mining business pretty extensively. A. J. Condee, Captain Johnson, D. G. Mitchell and E. H. Gruwell on Monday morning filed locations on two mines in the Andrez valley mining district, Mr. Condee on one and the other three gentlemen on the other. These are in addition to another mine filed upon a few days ago in which, with three others, Messrs. Mitchell and Gruwell are interested. The prospects are good in these locations, so the locators claim, but none of the officers have as yet handed in their resignations with a view of entirely embarking in the mining business. The mining will likely be done by proxy.

## San Jacinto Mines.

There is richness in the San Jacinto mountains some of the numerous prospectors are finding out to their immense satisfaction, says the *Register*.

L. Hansen, who has just returned from a tour of inspection, is enthusiastic over the prospects of a lively mining camp in the Tauquitz mining district. Mr. Hansen's best claim, the one he takes the most pride in, is the "Little Lily." He says the ledge is a well defined one and can easily be traced for twenty miles and has a width of 100 to 300 feet. The majority of the claims already taken are on this ledge. The rock has been assayed by different assayers of Denver and Los Angeles, and each assay brings the cheering news that the rock pays to be mined. The rock will run from \$25 to \$1,000 per ton. The rock from one claim has repeatedly assayed from \$900 to \$1,000 per ton. The mines are situated about twenty-eight miles east of San Jacinto.

## "The Jumbo."

The Jumbo, owned by Messrs. Rawson & Bethurum, has four men hard at work opening up the mine, sacking the rich ore and preparing a wagon road to the mine. This mine is practically just prospected, yet it shows, all told, about twelve inches of rock, ranging in value from \$25 per ton away up into the thousands. It is almost incredible to see the coarse gold show up in the horn spoon from samples picked up indiscriminately from the dump. Several tons of this rich ore is now sacked awaiting the completion of a road, so it may be hauled away and milled. Some idea of the richness of this mine may be had when it is known that an experienced miner has offered to sink a shaft 300 feet deep upon it for what he can get out of the shaft, and this offer has been refused by the owners.

A twenty-stamp mill will be erected in a very short time at the Leon mine, a few miles southeast of Perris.

A rich strike is reported in the Santa Rosa.

Colonel Hasson expects to begin operations on the Little Maggie in about ten days.

Active work is going on on the Gavilan property and we expect to hear good reports soon.

R. W. Chilson has sold his half interest in the K C mine at Hemet to A. A. Caldwell and others.

The Santa Rosa is dropping ten stamps regularly these days and many familiar faces are seen thereabouts.

At the Alice mine in Menifee everything is running smoothly and the little entanglements are being rapidly straightened out.

Thomas Hancock is having five tons of rock from his bonanza find south of town, milled by J. B. Dennis at the Indian Queen.

The shaft at the Gold King is now down about 120 feet and the gold-bearing vein is getting better. The vein averages from 4 to 18 inches in width. On Friday last water was encountered for the first time, but it will not in any way retard the progress of sinking.—*New Era*.

## SAN DIEGO COUNTY.

## The Picacho Gold Mines.

Never in the history of this old camp, which has turned out its \$10,000,000 in gold, was the interest deeper, or the faith in the future more abiding than at the present writing. Every day's work is telling well for the mines.

The Oro Blanco, on the famous White Gold Vein, leads off with a vein of ore 1400 feet in length, and from 20 to 100 feet in width, from which 460 tests gave an average result of \$74 per ton in free gold. This great vein is cut lengthwise by a canon from 40 to 100 feet deep, thus exposing the vein the width of the canon, and the sides of the vein where they have not been cut down by the water.

The Alcyon follows with a vein 31 feet, of copper, gold and silver, which shows in 375 tests ore running from \$5 to \$200 per ton in free gold. The vein is cut by a cross-cut and tunnel, but only one wall in sight. This alongside of the Oro Blanco mine, 1½ miles from the Colorado river and one mile east of Picacho.

The May Queen, four miles east, and on the bank of the river, at 80 feet in depth, shows \$60 ore. The vein is 20 feet wide near the surface, and an average test made assayed \$8.07 per ton in free gold.

In the tunnel on the opposite side of Providencia canon, the surface only showed a color of gold. Ten feet further in on the vein, the ore runs \$40 per ton.

The nugget mine, adjoining, shows \$40 ore. The ore on the surface did not show a color.

The richest ore ever found in the group was on the mines joining the May Queen on the east. It assayed \$120 per ton.

The Golden Dream, which crosses both the May Queen and Nugget veins, two claims west, shows \$5 ore in the Queen vein, which is 22 feet wide, and \$6 ore in the Nugget vein, which is 30 feet wide. Both have been cross-cut on the surface and a tunnel is being run on the wide vein.

The development in the White Gold Basin is most satisfactory in its results. The work is being pushed. The large amount of work done by Senator Dorsey on his large group in the Picacho Basin has done much to establish the permanency of that section, while that done in the White Gold Basin, places it among the most promising of any along the Colorado river.

A wealthy Philadelphia company has secured the Nectar group of five mines in the White Gold Basin, which they will develop when cool weather returns.

A New Jersey syndicate has secured the Golden Dream group, upon which they will put a mill. These mines are only half a mile from the river.

An eastern syndicate has secured 16 good claims in the Picacho Basin.

Shanklands Cariso mines promise well. They carry gold, silver and copper, which assay as high as \$400 per ton. These lie 7 miles west of Picacho and 5 from the Colorado.

The Gatalan copper, silver and gold mines are opening up well. The ore runs from \$60 to \$106 per ton. They are 12 miles west of Picacho and 8 from the river.

Very rich copper, gold and silver ore has been struck in the Capella mine, which lies on the White Gold vein, 2 miles east of Picacho, which shows that thus far all the veins carrying copper also carry good gold and silver ores.

The white quartz in all this section is generally barren. Whenever any copper is found, the ore pays well in gold and silver.

The prospects were never as good in the old Picacho mining district as at the present time—never was the interest deeper or more confident of success. Some of the best mining men in the west are quietly picking up good claims which they will open up in the fall. Everywhere any work has been done, good results have followed, not a failure thus far has been known. The district has been exceedingly free from shysters, only one or two Polish Jews thus far having appeared to cast a shadow over the future of this coming great camp.

X. X.

Speaking of Salton, Mr. Westerfield of Riverside states that the business of that station has so increased of late, owing to the activity in the mines adjacent, that the Southern Pacific Company has been compelled to enlarge the depot room there. Salton is the headquarters for a large section of the desert country now occupied by the busy prospector, and it is there that the supplies for the mines is forwarded from by wagon and pack train.

A rich find has been made at Oak Grove Field on a round knoll near Warner's ranch, supposed to be the Lost Indian mine. Twenty years ago an old Indian would occasionally bring gold nuggets to Warner's ranch, but he died without revealing the source of his wealth, so that no one ever knew. The present discovery is thought to be the same ledge.

## LOWER CALIFORNIA.

A. S. Munson, of the Vrzigua mine at Alamo, was in Los Angeles the 26th ult. He is very much satisfied with mines and mining in general in Mexico.

The shaft of the Viznaga is down about 230 feet and they are still sinking on it. The ore is improving with depth and averages about \$30 to the ton. They are putting in a pipe line from the creek at the Soldiers camp, three-quarters of a mile from the mine, and will pump water to the mine to run the ten stamp mill. There is only enough water to run the mill fifteen hours, but they will be able to run it continuously as soon as the pumping plant is in place. The boiler and engine are on the way down there now. The Viznaga is owned by Messrs. Hartzell Davis, Munson & Bliss. The latter gentleman is a New York capitalist, and the former gentlemen are residents of Los Angeles.

## MEXICO.

Mr. Whitworth, representative of a Louisiana company, has charge of the work in the San Jose mine, district of Altar, Sonora, and is pushing it vigorously. Works will soon be set up for the reduction of metals.

A company has been formed to work the mine "El Porvenir," recently discovered at Julimes, district of Camargo, State of Chihuahua. Assays of the ore taken from this mine give forty-six ounces of silver and sixty-four per cent. lead per ton. The property is divided into 1,200 shares, 600 of which belong to the owners of the mine, and the other 600 have been placed on sale and are being rapidly taken. Among the shareholders are a number of prominent men: Enrique C. Creel, Lic. Romulo Juarieta, Lic. Albino Uribe, Lic. Manuel Prieto, and others.

In the mining district of Pachuca, State of Hidalgo, much damage is being done by the invasion of water into the mines. The secretary of fomento has formulated certain plans for the remedying of this evil. *La Nueva Prensa*, of Pachuca, states that a number of mining concerns in that district, through their representatives, entered into a written agreement to carry out the suggestions of the secretary of fomento, which agreement is to remain in force for one year, after which each company will resume all the rights which it held in respect to the others. Three of the companies, Real del Monte, Rafael, and Maravillas, bind themselves to place in operation their pumping apparatus, and each company binds itself to pay its proportionate part of the expense, as determined by the commission of engineers for the purpose by the department of fomento.

"La Valenciana" is the name of a mine in the La Colorado mineral district, some 900 yards north of La Zaragoza, which, among the new mines that have not been worked many months, is one of those having the best outlook. It has a shaft 100 feet deep and two tunnels, one at the bottom of the shaft toward the north, and one at sixty feet from the surface to the east. Already three kinds of ore, to the amount of 200 tons, have been extracted, which are pure and ready for smelting. At sixty feet from the surface there is a vein running east and west with a spur to the north, having an inclination, approximately, of seventy degrees, a width of forty inches, and height of eighty inches, the ore of which runs \$25 gold and \$30 silver to the ton. Said vein divides into two branches, and the second pays 1.30 ounces of gold and eight ounces of silver per ton. In the tunnel before mentioned, at sixty feet depth, is a vein two and one half yards high by four yards wide, which pays at the rate of \$90 per ton. Experience has demonstrated that, in La Colorado as well as Las Prietas district, rich deposits are found at a depth of from 200 to 300 feet, and since La Valenciana is yielding the results above referred to at so short a distance from the ground, it must be agreed that at the regular depth it will be very rich. The intelligent engineer Señor Ricardo Gayou is of the opinion that "La Valenciana" is a mine of great future, and estimating it still as a simple prospect, he considers it, if not the best, as one of those which stand in the front rank. We believe that the owners will become millionaires in a few years, since all the probabilities are in their favor and none against them.

## GENERAL NEWS

The Colorado Iron Works Company of Denver, Colo., have just completed arrangements with Mr. C. T. Finlayson of Denver, whereby they have secured the exclusive right to manufacture and sell the Finlayson Patent Wire Rope Tramway. This tramway is of the double rope type, having a standing or still rope over which the bucket carriers run and a traction or tail rope which regulates the speed of buckets and to which they are attached. One feature of this system is the automatic device for attaching and detaching the buckets to the tail rope. This arrangement, while very simple, has been long sought for among builders and users of the double rope tramway systems, and until now has never been brought out. Another feature is the carriage at each terminal for

gradually starting the buckets which are at rest, avoiding the jar to the rope and doing away with the labor of shoving buckets to give it required momentum of rope. Another very important feature is the automatic loading and dumping devices. This tramway is built for light or heavy tonnage. Any one contemplating the erection of a tramway cannot afford to purchase without first investigating the merits of the Finlayson Patent Wire Rope Tramway. The Colorado Iron Works Company will be pleased to furnish literature and any information desired.

### Wm. T. Smith & Co.'s Mining Camp.

This camp is located in Los Angeles, Cal., in a large hall formerly occupied by the Supreme Court. It contains desks fully equipped with writing material, etc., tables and chairs, and will at all times have on file the leading mining papers, and standard daily and weekly periodicals. There is also a bulletin board where mine owners can advertise for miners, mill men, etc., and in fact notices of all kinds can be posted thereon.

It contains a long table divided into compartments where prospectors can have their ore on exhibition, leaving a typewritten or printed description of the location of their ledge and their assay certificates.

The hall will be open daily from 7 a. m. till 6 p. m. and all persons connected with mining interests are perfectly welcome, and there will be no charge whatever made for the use of the camp.

The object in establishing this camp is to bring the prospectors, miners and capitalists in closer and more friendly contact, and at the same time advertise the firm of Wm. T. Smith & Co., gold and silver refiners and assayers.

This firm commenced the business of refining gold and silver March 5th, 1895, in a small room at 128 North Main street, being then somewhat doubtful as to the success of their enterprise. Within three months thereafter they were obliged to double their facilities and space.

They have now leased the entire suite of chambers in the same building, including those formerly occupied and recently vacated by the Supreme Court, where the above mining camp is located.

The firm's business consists in making assays for all precious and useful metals and in the buying of gold and silver in all forms, either in the shape of old and broken jewelry or silverware, or of placer gold, just as it is washed out from the earth, of retort gold and silver as it comes from the quartz mills, and, in fact, gold and silver in any form whatever. These metals are refined in Los Angeles by them, and then shipped to the Mint to be coined.

The copartnership heretofore existing between Wm. T. Smith and J. J. Lonergran was dissolved by mutual consent May 21st, 1896, Mr. James Irving having purchased the interest of J. J. Lonergran.

The firm will conduct business under the same name as heretofore.

The firm consists of Mr. William T. Smith, a thorough chemist and metallurgist, and Mr. James Irving, a reliable and energetic young business man, known to the bankers and merchants of Los Angeles for the past ten years.

Recently the bank at Weiser, Idaho, sent to the Crocker-Woolworth National Bank in this city (San Francisco) for \$500 worth of

silver from the sub-treasury. The sub-treasurer said the silver must be obtained from the sub-treasury at Chicago. The sub-treasurer at that point returned the draft to Weiser and stated that "his office did not accept drafts or checks for any purpose whatever." The Idaho banker then instructed his New York correspondent to deposit \$500 in cash with the sub-treasury in that city. This was done and the Weiser man was informed that the silver would be shipped from San Francisco. The banker waited for two weeks, and, as the silver did not arrive, he appealed to the assistant treasurer at Washington. This appeal finally brought the coin from St. Louis. It had taken just two months of persistent demands to force the administration to release \$500 worth of silver, which the officials say the people do not want.—*Mining and Scientific Press*.

## PATENTS.

Messrs. Hazard & Townsend, solicitors of patents, room 9 Downey Block, Los Angeles, California, report the following recent patents of interest to mining men:

June 9. No. 561,952.—Amalgamating apparatus. J. W. Hackett, Charlestown, Indiana. A reciprocating pan, provided with amalgamating surfaces, has movable amalgamating rakes arranged to rake through the pulp, and a magnetic riffle board is supported upon the pan beneath the feed thereof, to catch the iron.

June 9. No. 561,629.—Ore concentrator. L. R. Tullock, Angels' Camp, California. A movable concentrator belt is arranged to be independently reciprocated sidewise, by means of clutch mechanism connected with the frame-moving mechanism.

June 9. No. 561,630.—Feed mechanism for ore concentrator. L. R. Tullock, Angels' Camp, California. A shaking ore feed box, having a removable slotted or perforated bottom, is provided with chutes for conveying the ore which passes through the slots to the belt, and delivering it thereupon at different points.

June 16. No. 562,158. J. R. Sears, Stockton, California. Assignor one-half to D. C. Matteson, same place.—A slightly inclined, horizontally arranged, removable cylinder is provided with hollow trunions, through which the ore is introduced into and removed from the cylinder; the cylinder is supported near its mid-length upon a bearing wheel, and is heated by hydrocarbon fuel.

Copies of these patents may be obtained for five cents each (no stamps) by addressing the Commissioner of Patents, Washington, D. C., giving the date, number of patent, name of inventor and title of invention of each patent ordered.

L. C. Moreland is having a new patent roller stamp mill constructed in this city. It has a heavy circular shoe with five inclines and drops upon which five heavy wheels travel. The wheels run up the inclines and drop over the edge of each incline to the base of the succeeding one, all five rollers dropping simultaneously. The rollers are not beveled thus giving a grinding motion to the crushing. There are five feeders just in front of the rollers. It makes 100 revolutions per minute or 500 drops, and is calculated to crush twenty tons of ordinary quartz in twenty-four hours.

**Smelter Goes to Cerrillos.**

The smelter that was to have been put up in Albuquerque will not materialize there because the stock was not subscribed for, but it is to be located at Cerrillos, whose citizens have taken stock and agreed to furnish necessary land and water. Mr. Balue, who was in Albuquerque June the 25<sup>th</sup>, stated that the company had been incorporated, that the necessary money had been subscribed to carry out the project, and that the work of building the smelter will be begun at Cerrillos next month.

Anaconda, Montana, is to have a plant for the manufacture of sulphuric acid from the smelter smoke. At first the capacity will only be sufficient to furnish this product for the Anaconda company, but will be increased in the near future.

The Palomas Chief, at Hermosa, will have an invoice of ore soon for transportation to the railway, which will complete their shipment.

J. E. Wheeler and his son, Frank, have a small shipment of high grade ore ready on the dump of the Argonaut Consolidated, near Hermosa, New Mexico.

The No Hay Nada, Jefferson Lost Mine and other claims in the Central district are showing up to good advantage, and considerable quantities of high grade ore are being piled upon the dumps, near Central N. M.

J. D. Weems, of Separ, made a carload shipment of ore early in the week to the Deming Sampler.

M. C. Weaver is working his mine in the Tres Hermanos district, is taking out good ore and will begin shipping about August 1<sup>st</sup>.

A new character of ore has been struck in the drift of the Almos near Chloride in the Black Range that gave assay returns of 563 ounces silver and one ounce in gold to the ton.

Gearhart and McKinna shipped a car load of ore to the Deming sampler this week from the Beck mine near Mogollon, N. M.

A car of ore from the Wyman mine near Stein's Pass was received at the Deming Sampler this week.

**PERSONAL NEWS ITEMS**

P. R. Van Horn, one of the discoverers of the famous Gypsy silver mine at Kingston, New Mexico, is in Newton, N. J.

John Lannon, who has been at Cripple Creek, Colo., has just returned to Hillsboro, New Mexico.

R. D. Barton, who has been prospecting in the Baldy district, spent the latter part of last week in Raton, New Mexico.

George Shiffer, who has been prospecting in Arizona, has just returned to Silver City, N. M.

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For working the sands from separating box.

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E. R. Swart, of Redlands, was in Los Angeles, 25<sup>th</sup>. He was very much pleased over assays from the Golden Summit, near the Lost Horse mine in Riverside County.

Col. C. C. Bean is in Prescott on mining business.

A. S. Munson, of the Viznaga mine in Lower California, was a caller at the JOURNAL office, the 26<sup>th</sup> ult.

F. K. McNamara, amalgamator for the Piedad Mining Company, in Lower California, is again back at his post.

L. C. Graupner, the general representative of the Park & Lacy Company, manufacturers of mining machinery, paid a flying visit to San Diego last week.

Henry Strawbell was in Kingman, from Cerbat, Arizona, June 15<sup>th</sup>, with a sample of ore that assayed well in gold, silver and lead.

D. B. Gillette, the well-known mining man of Prescott, Arizona, has returned to that place from a visit to Colorado.

Geo. Box, editor of the "Lower Californian," published at Ensenada, Lower California, was a caller at the JOURNAL office, the 26<sup>th</sup> ult.

H. L. Ryan, of the Lost Horse mine, near Banning, called at the JOURNAL office, on the 22<sup>nd</sup> ult.

John Smithline left for the Lucky Boy mine, from Kingman, Arizona, the 17<sup>th</sup> ult.

N. A. Root, the traveling representative of the Edward P. Allis Company, of Milwaukee, Wis., was in Los Angeles the 26<sup>th</sup> of June, and left for San Francisco immediately, where they have a branch office.

A. H. Beach, who is interested in a number of mining claims in the Escondido district, spent several days in San Diego a few weeks ago. He is very enthusiastic over the mining outlook in the Escondido district.

Del Beebe was in Kingman, Arizona, the 15<sup>th</sup> ult., from the Conners mine near that place.

E. M. Wade, of the firm of Wade & Wade, assayors and chemists, has gone to Catalina Island for a few days, on a combined business and pleasure trip. He will examine the geological formation of the island.

P. M. Johnson has returned to San Diego from a short trip to Ensenada.

Henry Loven, a mining man of Arizona, was in Kingman, from the placers, the 18<sup>th</sup> ult.

C. B. Smith, of Pasadena, Cal., was in Los Angeles the middle of June.

Fred Wasson went to Ensenada, from San Diego, last week, and will go from there over to the gulf side of the peninsula, where he will engage in placer mining on some claims recently discovered by him.

Judge Brakeman has gone to Chloride, Arizona, to erect a hoist on the Elkhart mine at that place.

Messrs. Hutchinson & Barney, who have been prospecting in Ventura county, near the Frazier mountains lately, returned to Los Angeles last week.

J. M. Farley, formerly superintendent of the Shendoah mine, has moved to Banner, and will take charge of the Gold King mine.

Capt. James Huntington was in San Diego the first of last month, from the Boulder Creek mines.

James Bone was in Kingman, Arizona, from the Great West mine the 19<sup>th</sup> of June.

N. Couts, of Calabasas, Cal., was in Los Angeles last week.

Mr. A. L. McKesson, of Chloride, Arizona, was in Kingman, with an ore shipment, June 22<sup>nd</sup>.

A. J. Stoddard, the gentleman who put up the Griffin mills, for the Old Glory Mining and Milling Company, at Oro Blanco, Arizona, was in Los Angeles, Cal., a few days ago.

J. H. Branson, of Butte City, Montana, was in San Diego a few weeks ago. He has left for Descanso and Pine valley to examine a mine in that section.

Mike Shay, foreman of the Gold Basin Mining Co., at Gold Basin, Arizona, was in Kingman the 15<sup>th</sup> of June.

L. E. Porter, who has been residing at Mojave, Cal., is in Los Angeles. Mr. Porter has been working some of the Erskine Creek ores by an electrical cyanide process.

H. R. Dalzell, a gentleman extensively interested in the mines of Idaho, is in San Diego. He will take a look over that mining district before returning home.

R. T. Tustin, of the Last Chance mine, near Prescott, Arizona, has returned from the east and is now out at the mine.

D. C. Lane, of Pomona, Cal., was a caller at the JOURNAL office on the 24<sup>th</sup> ult. Mr. Lane had a fine piece of mica which was sent him from San Diego county.

Joe McCabe, a prospector of the Dragoons, was in Bisbee, Arizona, June 18<sup>th</sup>.

A. R. Bryson called at the JOURNAL office, the 17<sup>th</sup> ult. He has just returned from Lower California, and is on his way east to close up a sale of a large gold mine on the peninsula.

Col. Austin O. Crane, manager of the Kasser Gold Mining Co., has just returned from New York City to Globe, Arizona.

A. B. Salisbury, who has some mining properties in Lower California, was in the city a few days ago.

Col. Sweet, a millionaire mining man of Chicago, and a large stockholder in the Last Chance Mining Company, whose properties are located near Prescott, was in Prescott, the 18<sup>th</sup> of June.

Alexander Goodfellow, a prominent mining man of the desert country, near Salton, Cal., was in the city the 27<sup>th</sup> ult.

Mr. L. Amster returned to Globe, June 16<sup>th</sup>, from New York City, where he has been trying to place some mining properties.

Joe Gilbert, superintendent of the Red Rover mine, at Acton, Cal., was in Los Angeles the fore part of June.

Mr. N. D. Burlingham, a prominent mining man of Garden Valley, Eldorado county, Cal., was a caller at the JOURNAL office, June 29<sup>th</sup>.

Samuel L. Brannan, son of the late Sam Brannan, one of the wealthiest and most noted of California pioneers, came up on the Anita from Calumet, to San Diego, on the 9<sup>th</sup> ult. Mr. Brannan has long been associated with the mining interests of the coast, and, after a short visit to San Francisco, will return to San Diego and engage in the mining business.

Frank C. Perley, who has been prospecting for several weeks in the Dragoons, returned to Bisbee, Arizona, June 18<sup>th</sup>.

**OBITUARY.**

David M. Menzies and Wm. Lomax were killed, June 17<sup>th</sup>, in the Bunker Hill mine, near Gorman Station, in the Frazier mountains, by the tunnel caving in on them. Mr. Menzies was an old resident of the Gorman Station region, where he had lived for eleven years. Mr. Lomax was from Philadelphia and bore a good reputation.

J. J. L. Valentine, foreman of the Leland Stanford group of mines now being worked on Groom Creek, Arizona, was overcome by powder smoke in a shaft after two shots had been fired. He was found dead about 5:30 o'clock p. m., June 17<sup>th</sup>.

Sing Lee, a Chinese merchant at Morelands camp, near Gila City, Arizona, was murdered June 28<sup>th</sup>.

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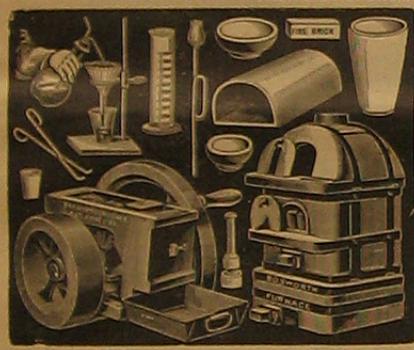
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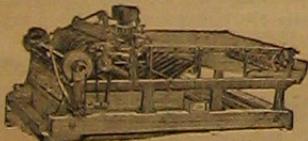
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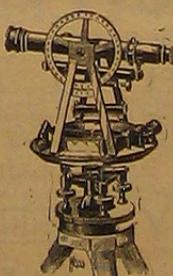
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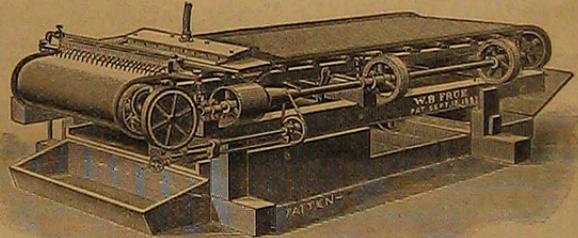
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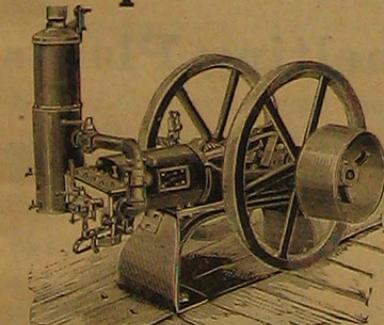
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	SILVER	COPPER	LEAD
June 16	685	10 75	2 90
" 17	687	11 00	2 90
" 18	687	11 00	2 90
" 19	687	11 50	2 90
" 20	685	11 75	2 90
" 22	685	12 00	2 90
" 23	687	12 25	2 90
" 24	687	12 00	3 00
" 25	691	12 00	3 00
" 26	691	12 00	3 00
" 27	691	12 00	3 00
" 28	691	12 00	3 00
" 30	69	12 00	3 00

## MINING STOCK QUOTATIONS.

## BOSTON

Allouez	1 00	Franklin	12 00
Atlantic	1 00	Kearny	10 05
Boston & Mont'a	75 00	Oscella	25 00
Butte & Boston	3 00	Quincy	15 00
Cal. & Helca	300 00	Tamarack	85 00
Centennial	2 00	Wolverine	6 50

## COLORADO SPRINGS STOCKS

Anaconda	58	Mollie Gibson	60
Blue Bell	03	Mattox	15
Cofax	05	Mount Rosa	10
Columbi	03	Ophir	10
Fanny Rawlins	10	Orphan Bell	13
Gold King	53	Pharmacist	10
Gold and Globe	22	Portland	145
Isabella	52	Work	12
Jack Pot	07	World	02
Jefferson	18	Del Monte	03
Monarch	08		

## DENVER STOCK REPORT.

Alamo	06 1/2	Anaconda	56
Bangkok	07	Aola	43
Bankers	11	Big Six	10
Croesus	05	Boston & Id	17
C. C. Con	13	Cofax	06
Chimbarazo	03	Gold & Globe	20
C. & C.C.	06	Mollie Gibson	75
Golden Fleec	1 80	M. L. Rosa	10
Gold Standard	09	Pharmacist	10
Isabella	54	Union Gold	40

## HELENA, MONTANA

Alice	25	Granite Mount	1 65
Bald Butte	3 55	Hope	1 50
Benton Group	10	Iron Mountain	45
Bi-Metallic	3 00	Ontario	1 00
Elizabeth	10	Poorman	40

## NEW YORK.

Crown Point	45	Sierra Nevada	65
Con, Cal & Va.	1 80	Standard	2 75
Gould & Curry	40	Union Con	53
Hale & Norcross	1 20	Iron Silver	10
Homestake	80 50	Quicksilver	3 00
Iron Mountain	50	Quiver pid	12
Ontario	14 50	Bulwer	25
Ophir	1 30	Yellow Jacket	25
Plymouth	20	Deadwood	45

## SAN FRANCISCO.

Alta	08	Mono	15
Belcher	47	Nevada Queen	05
Best & Belcher	6	Ophir	1 25
Bonnie Con	6	Potosi	35
Carroll	8	Seaville	30
Con, Cal & Va.	1 80	Sierra Nevada	65
Crown Point	45	Union Con	53
Hale & Norcross	1 25	Utah	12
Mexican	45	Yellow Jacket	35
Gould & Curry	55	Bulwer	25

## ST. LOUIS.

American Nettie	25	Elizabeth	20
Granite Mt.	1 60	Leo	3
Adams	60	Hope	1 40
Bimetallic	3 30	Small Hopes	90

## SALT LAKE CITY

Ajax	85	Eureka Hill	120 00
Alliance	50	Horn Silver	2 05
Am. Nat. G's.	07	Little Pittsburg	63
Anchor	2 25	Lucky Bill	25
Appex	07	Mammoth	2 80
Bogart	25	Mearns	50
Bull, Beck	6 90	Mercur	7 10
Cane Springs	80	New Tropic	2 80
Cent. Eureka	76 00	Niagara	2 25
Cleve. Con	45	No. Eureka	05
Comstock	15	North Spy	2 40
Crescent	04	Ontario	14 00
Dalton	09	Silver King	16 25
Daly	8 50	Silver Spar	1 00
Daly West	7 70	Tetro	02
Elko	20	Utah	1 85

## MEXICO

Name of Company	State	Price
Angustias	Guanajuato	\$ 250
Asturiana y Anexas	Zacatecas	440
Cerro Colorado	Chihuahua	10
Comision y Anexas	S. Luis Potosi	200
El Oro	Guanajuato	80
do, pre.	Michoacan	30
Luz de Horda	"	30
do, Free stock	Hidalgo	200
Luz de Maravillas	Hidalgo	1,000
Real del Monte	"	80
Rosario y Anexas	Durango	80
do, prof.	"	80
San Rafael del Oro	Guanajuato	800
Sto. Geronimo y Anexas	Hidalgo	75
do, Free Stock	"	16
Sto. Maria de la Paz	S. Luis Potosi	30
Tlauzingo	Puebla	40
Zomehuanca (gold)	Vera Cruz	60
Zona Min de Pozos	Guanajuato	70

NOTE—The above Mexican stocks are figured on the basis of Mexican silver.

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SHEET METAL WORKS  
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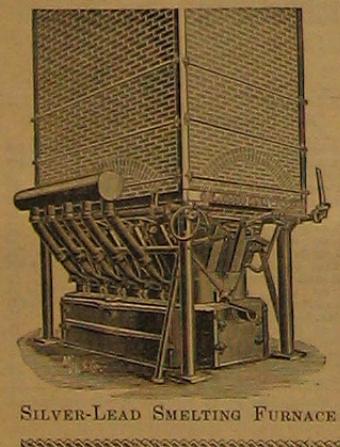
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Write for estimates on complete Milling, Mining and Reduction Plants.

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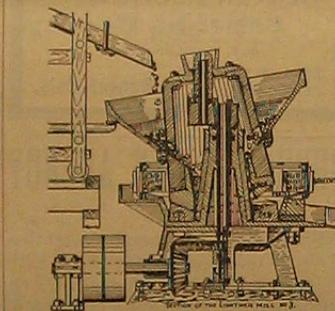


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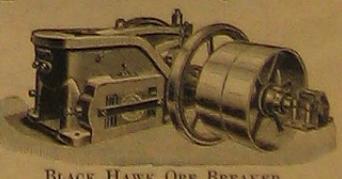
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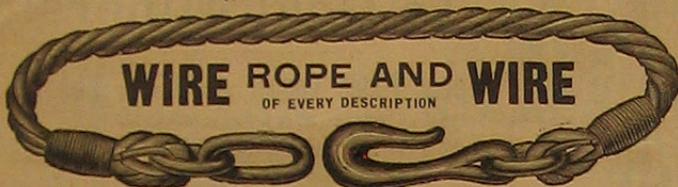
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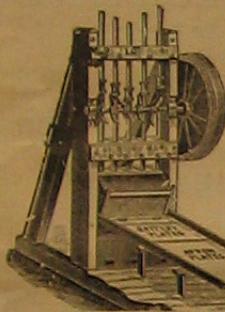
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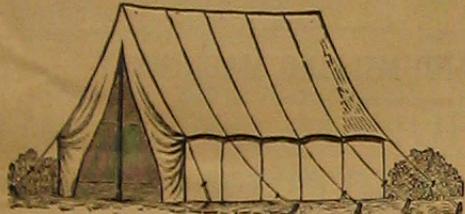
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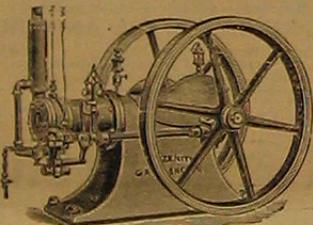
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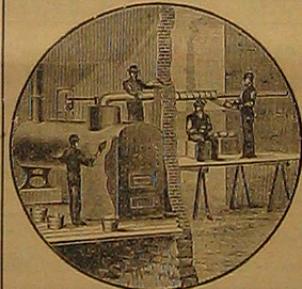
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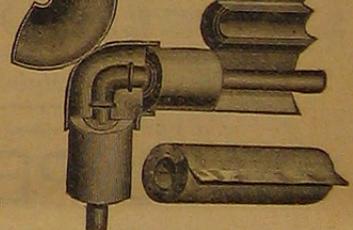
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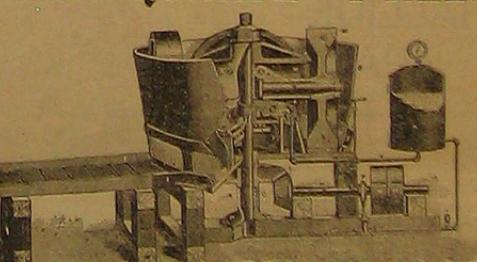
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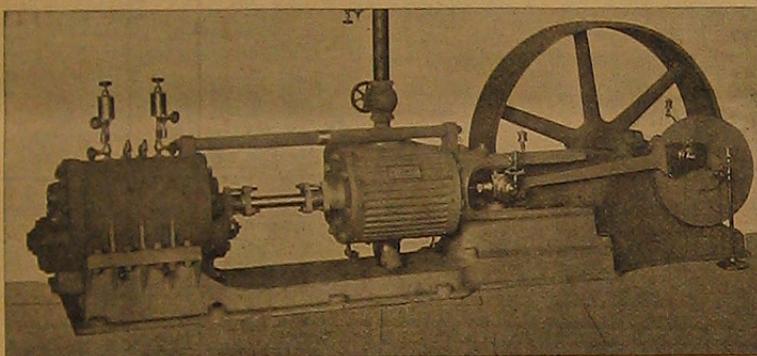
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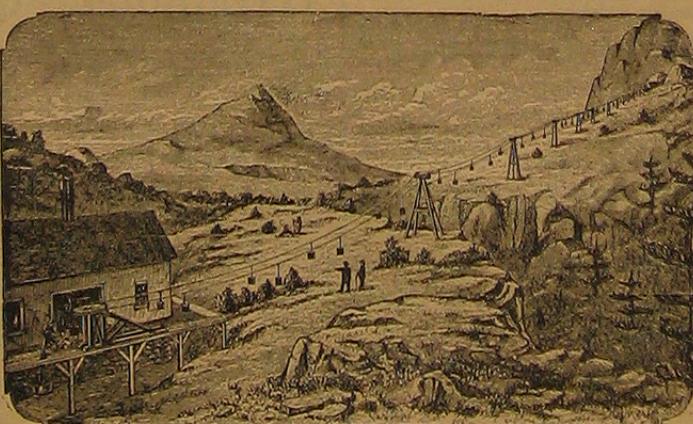
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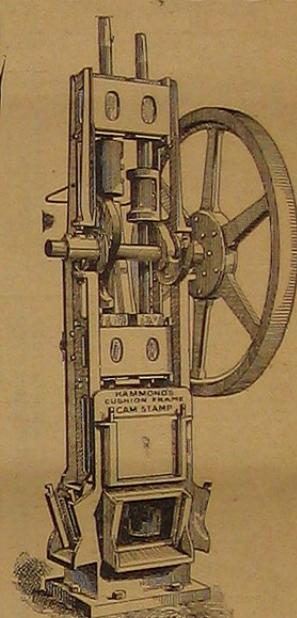
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- 2d. Cheaper than the Wooden Frame Mill when ready to run.
- 3d. Saves a great amount of delay in erection and it can be set up in as short a time as a self contained engine.
- 4th. Saves much space.

We call the attention of Prospectors to our Self Contained Two Stamp Mill.

We have inaugurated a system of amalgamation and Concentration which renders both much more satisfactory and cheapens the cost of concentration by a great saving in the repairs to the complicated machinery now used.

Parties intending erecting mining plants would do well to investigate our mills. We build any mill desired and will deliver F. O. B. Steamer or cars at San Francisco, California.



We are prepared to furnish parties desiring small plants in localities where fuel is extremely expensive, with mills coupled up and ready to run with gasoline engines, guaranteeing the efficiency of both engine and mill.

Write us for Catalogues and Estimates

## HAMMOND MANUFACTURING COMPANY

### VICTOR AMALGAMATOR CO.

MANUFACTURERS OF

VICTOR AMALGAMATORS FOR MILL OR : : : PLACER USE.

Read what one of the First Mill Men in the County Says of it:

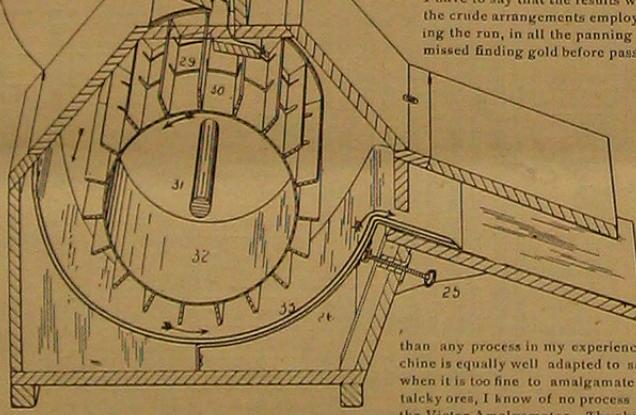
To VICTOR AMALGAMATOR CO.,  
703 South Main St. Los Angeles, Cal., May 20, 1866.

Dear Sirs:—Referring to the run made by me of fifty tons of the black sands near Santa Monica with the Victor Amalgamator I have to say that the results were quite satisfactory, considering the crude arrangements employed in feeding the machine. During the run, in all the panning (of over one hundred) I never missed finding gold before passing through the machine, and after passing the machine, I found only two colors in panning after going through; In other words, only two colors were found in the tailings after panning over 120 pans. Of the many methods that have been tried for saving the gold from the sea-sands on this coast for the last twenty-five years, none have given as satisfactory results as the Victor. I have no hesitation in saying that the machine properly handled, will save a larger per centage of gold contained in sea-sands

than any process in my experience of over thirty years. The machine is equally well adapted to saving the gold from mill tailings when it is too fine to amalgamate on ordinary plates. In milling talcose ores, I know of no process so well adapted to saving gold as the Victor Amalgamator. The above run showed the capacity of the machine (small size) to be about twenty-five tons per day.

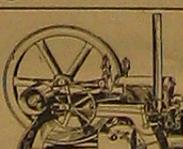
Respectfully, GEO. O. KILBOURNE,

Manufactured only by the  
Victor Amalgamator Co.,  
703 SOUTH MAIN STREET  
Los Angeles, Cal.



Send for catalogue and particulars.

WOODWARD BROS.  
SUCCESSIONS TO  
E. H. GREEN  
MANUFACTURER OF  
Irrigation Machinery of all Kinds  
Agent DANIEL BEST ENGINE, using either Gas,  
Gasoline, Distillate or Crude Oil.  
Pumps Tanks, etc. 659 BEUNA VISTA ST.  
Telephone 482. Los Angeles, Cal.



### SAVILLE, MACLYMONT & CO.

Mining and Consulting Engineers and Metallurgists.

Examine and report on mines, ore bodies, and all metallurgical processes connected therewith. Have Complete Stamp Mill and Concentrating Plant, Practical Mill Tests, Assays, and Analyses of Ores, and General Analytical Work, undertaken at the

California Metallurgical Works,

Reference to leading mining men furnished on application.

10 ANNIE STREET, SAN FRANCISCO

(Opposite Palace Hotel)

## LLEWELLYN IRON WORKS.

Manufacturers and Dealers in —

All Kinds of Mining, Smelting and Milling Machinery,

LOS ANGELES, CAL.

69 FIRST STREET,  
PORTLAND, OR.

E. E. BURLINGAME'S  
ASSAY OFFICE <sup>a</sup> Chemical <sup>b</sup> and <sup>c</sup> Laboratory  
Established in Colorado, 1866. Samples by mail or express will receive prompt and careful attention. Gold and Silver Bullion refined, melted and assayed, or purchased.

Address 1736 and 1738 Lawrence St., Denver, Cal.

### Union Iron Works

Manufacturers of and Dealers in

**Mining,  
Milling,  
AND  
Smelting**

### MACHINERY

Foundry and Machine Shops.

ALBERT THOMAS, Prop.  
First and Alameda Sts. Los Angeles, Cal.

Miners will find the ore tariffs on page 18 reliable. We have special arrangements with the different railroads to receive any changes as soon as made.

## ORE TARIFF.

From Points in Mexico, New Mexico, Texas and Arizona, to El Paso, Pueblo, Denver and Kansas City.

## ATCHISON, TOPEKA &amp; SANTA FE R. R.

| FROM                          | TO          | Car Loads, in dollars and cents per ton of 2,000 lbs. |                                        |                                        |
|-------------------------------|-------------|-------------------------------------------------------|----------------------------------------|----------------------------------------|
|                               |             | Ore & Concentrates.                                   |                                        |                                        |
|                               |             | Valuation not to exceed \$50 per ton.                 | Valuation not to exceed \$100 per ton. | Valuation not to exceed \$500 per ton. |
| Guaymas...Mex.                | El Paso     | 10.00                                                 | 11.50                                  | 13.50                                  |
|                               | Pueblo      | 13.50                                                 | 15.00                                  | 17.00                                  |
|                               | Denver      | 15.00                                                 | 16.50                                  | 18.00                                  |
|                               | Kansas City | 15.00                                                 | 17.00                                  | 19.00                                  |
| Ortiz....."                   | El Paso     | 8.50                                                  | 11.00                                  | 13.00                                  |
|                               | Pueblo      | 12.50                                                 | 14.00                                  | 16.00                                  |
|                               | Denver      | 14.00                                                 | 15.50                                  | 17.50                                  |
|                               | Kansas City | 14.50                                                 | 16.00                                  | 18.00                                  |
| Torres....."                  | El Paso     | 9.00                                                  | 10.50                                  | 12.50                                  |
|                               | Pueblo      | 11.50                                                 | 13.00                                  | 15.00                                  |
|                               | Denver      | 13.00                                                 | 14.00                                  | 16.50                                  |
|                               | Kansas City | 13.50                                                 | 15.00                                  | 17.00                                  |
| Hermosillo....."              | El Paso     | 8.50                                                  | 10.00                                  | 12.00                                  |
|                               | Pueblo      | 11.00                                                 | 11.50                                  | 13.50                                  |
|                               | Denver      | 11.50                                                 | 13.00                                  | 15.00                                  |
|                               | Kansas City | 12.00                                                 | 13.50                                  | 15.50                                  |
| Pesqueira....."               | El Paso     | 8.00                                                  | 9.50                                   | 11.50                                  |
|                               | Pueblo      | 10.00                                                 | 11.50                                  | 13.50                                  |
|                               | Denver      | 11.50                                                 | 12.00                                  | 15.00                                  |
|                               | Kansas City | 12.00                                                 | 13.50                                  | 15.00                                  |
| Querobabi....."               | El Paso     | 7.00                                                  | 8.50                                   | 10.50                                  |
|                               | Pueblo      | 10.00                                                 | 11.50                                  | 13.50                                  |
|                               | Denver      | 11.50                                                 | 13.00                                  | 15.00                                  |
|                               | Kansas City | 11.50                                                 | 13.00                                  | 15.00                                  |
| Magdalena....."               | El Paso     | 6.50                                                  | 8.00                                   | 10.00                                  |
|                               | Pueblo      | 9.50                                                  | 11.00                                  | 13.00                                  |
|                               | Denver      | 11.00                                                 | 12.50                                  | 14.50                                  |
|                               | Kansas City | 11.50                                                 | 13.00                                  | 15.00                                  |
| Imuris....."                  | El Paso     | 6.00                                                  | 7.50                                   | 9.50                                   |
|                               | Pueblo      | 9.50                                                  | 11.00                                  | 13.00                                  |
|                               | Denver      | 11.00                                                 | 12.50                                  | 14.50                                  |
|                               | Kansas City | 11.50                                                 | 13.00                                  | 15.00                                  |
| Nogales...A.T.                | El Paso     | 5.50                                                  | 6.50                                   | 8.50                                   |
|                               | Pueblo      | 9.00                                                  | 10.50                                  | 12.50                                  |
|                               | Denver      | 10.00                                                 | 12.00                                  | 14.00                                  |
|                               | Kansas City | 11.00                                                 | 12.50                                  | 14.50                                  |
| Calabasas....."               | El Paso     | 5.50                                                  | 6.50                                   | 8.50                                   |
|                               | Pueblo      | 8.50                                                  | 10.00                                  | 12.00                                  |
|                               | Denver      | 10.00                                                 | 11.50                                  | 13.50                                  |
|                               | Kansas City | 10.50                                                 | 12.00                                  | 14.00                                  |
| Sanfords....."                | El Paso     | 5.50                                                  | 6.50                                   | 8.50                                   |
|                               | Pueblo      | 8.00                                                  | 9.50                                   | 11.50                                  |
|                               | Denver      | 9.50                                                  | 11.00                                  | 13.00                                  |
|                               | Kansas City | 10.00                                                 | 11.50                                  | 13.50                                  |
| Crittenden....."              | El Paso     | 4.70                                                  | 5.20                                   | 7.00                                   |
|                               | Pueblo      | 6.00                                                  | 7.00                                   | 11.50                                  |
|                               | Denver      | 8.50                                                  | 11.00                                  | 13.00                                  |
|                               | Kansas City | 10.00                                                 | 11.50                                  | 13.50                                  |
| Fairbank....."                | El Paso     | 4.40                                                  | 4.40                                   | 6.50                                   |
|                               | Pueblo      | 6.00                                                  | 8.50                                   | 11.50                                  |
|                               | Denver      | 8.50                                                  | 11.00                                  | 13.00                                  |
|                               | Kansas City | 10.00                                                 | 11.50                                  | 13.50                                  |
| Tucson....."                  | El Paso     | 4.35                                                  | 5.00                                   | 6.50                                   |
|                               | Pueblo      | 6.00                                                  | 8.00                                   | 10.50                                  |
|                               | Denver      | 10.00                                                 | 12.00                                  | 14.00                                  |
|                               | Kansas City | 11.00                                                 | 12.50                                  | 15.00                                  |
| Lordsburg....."               | El Paso     | 4.00                                                  | 5.00                                   | 6.50                                   |
|                               | Pueblo      | 6.00                                                  | 8.00                                   | 10.50                                  |
|                               | Denver      | 10.00                                                 | 12.00                                  | 14.00                                  |
|                               | Kansas City | 11.00                                                 | 12.50                                  | 15.00                                  |
| Silver City....."             | El Paso     | 2.80                                                  | 3.20                                   | 4.70                                   |
|                               | Pueblo      | 6.00                                                  | 8.00                                   | 10.00                                  |
|                               | Denver      | 8.00                                                  | 9.50                                   | 11.50                                  |
|                               | Kansas City | 8.50                                                  | 10.00                                  | 12.00                                  |
| Deming....."                  | El Paso     | 2.40                                                  | 3.00                                   | 4.50                                   |
|                               | Pueblo      | 6.00                                                  | 8.00                                   | 10.00                                  |
|                               | Denver      | 8.50                                                  | 10.00                                  | 12.00                                  |
|                               | Kansas City | 8.50                                                  | 10.00                                  | 12.00                                  |
| Florida and Lake Valley....." | El Paso     | 2.20                                                  | 2.60                                   | 3.00                                   |
|                               | Pueblo      | 6.00                                                  | 7.50                                   | 9.50                                   |
|                               | Denver      | 7.50                                                  | 9.00                                   | 11.00                                  |
|                               | Kansas City | 8.00                                                  | 9.50                                   | 11.50                                  |
| Nutt....."                    | El Paso     | 2.20                                                  | 2.40                                   | 3.40                                   |
|                               | Pueblo      | 6.00                                                  | 7.00                                   | 8.00                                   |
|                               | Denver      | 7.50                                                  | 8.00                                   | 10.50                                  |
|                               | Kansas City | 8.00                                                  | 9.00                                   | 11.00                                  |
| El Paso....."                 | El Paso     | 1.50                                                  | 2.00                                   | 3.00                                   |
|                               | Pueblo      | 6.00                                                  | 7.50                                   | 9.50                                   |
|                               | Denver      | 7.50                                                  | 9.00                                   | 11.00                                  |
|                               | Kansas City | 8.00                                                  | 9.50                                   | 11.50                                  |
| Las Cruces....."              | El Paso     | 2.00                                                  | 2.00                                   | 3.00                                   |
|                               | Pueblo      | 6.00                                                  | 7.00                                   | 9.00                                   |
|                               | Denver      | 7.50                                                  | 9.00                                   | 11.00                                  |
|                               | Kansas City | 8.00                                                  | 9.50                                   | 11.50                                  |
| Rincon....."                  | El Paso     | 2.00                                                  | 2.00                                   | 3.00                                   |
|                               | Pueblo      | 5.50                                                  | 7.00                                   | 9.00                                   |
|                               | Denver      | 7.00                                                  | 8.50                                   | 10.50                                  |
|                               | Kansas City | 7.00                                                  | 9.00                                   | 11.00                                  |

## S. C. D. &amp; P. R. SOUTHERN PAC. CO. NEW MEXICO &amp; ARIZONA R. R.

## A. T. &amp; S. F. R. SOUTHERN PACIFIC R. R.

## ORE TARIFF.

From Points in Mexico, New Mexico, Texas and Arizona, to El Paso, Pueblo, Denver and Kansas City.

## ATCHISON, TOPEKA &amp; SANTA FE R. R.

## ATLANTIC &amp; PACIFIC RAILROAD

| FROM                               | TO          | Car Loads, in dollars and cents per ton of 2,000 lbs. |                                        |                                        |
|------------------------------------|-------------|-------------------------------------------------------|----------------------------------------|----------------------------------------|
|                                    |             | Ore Concentrates.                                     |                                        |                                        |
|                                    |             | Valuation not to exceed \$50 per ton.                 | Valuation not to exceed \$100 per ton. | Valuation not to exceed \$500 per ton. |
| Engle.....N. M.                    | El Paso     | 2.20                                                  | 2.60                                   | 3.50                                   |
| Crocker....."                      | Pueblo      | 7.00                                                  | 8.50                                   | 10.50                                  |
|                                    | Denver      | 7.50                                                  | 9.00                                   | 11.50                                  |
|                                    | Kansas City | 7.50                                                  | 9.00                                   | 11.50                                  |
| Lava....."                         | El Paso     | 2.20                                                  | 2.80                                   | 3.80                                   |
|                                    | Pueblo      | 5.50                                                  | 6.70                                   | 8.70                                   |
|                                    | Denver      | 6.70                                                  | 8.20                                   | 10.20                                  |
|                                    | Kansas City | 7.20                                                  | 8.70                                   | 11.20                                  |
| El Paso....."                      | El Paso     | 2.40                                                  | 3.00                                   | 4.50                                   |
|                                    | Pueblo      | 5.50                                                  | 6.70                                   | 8.80                                   |
|                                    | Denver      | 6.70                                                  | 8.20                                   | 10.80                                  |
|                                    | Kansas City | 7.20                                                  | 8.70                                   | 13.40                                  |
| San Marcial....."                  | El Paso     | 2.50                                                  | 3.20                                   | 4.70                                   |
|                                    | Pueblo      | 5.50                                                  | 6.70                                   | 8.80                                   |
|                                    | Denver      | 6.70                                                  | 8.20                                   | 10.80                                  |
|                                    | Kansas City | 7.20                                                  | 8.70                                   | 13.40                                  |
| Carthage....."                     | El Paso     | 2.50                                                  | 3.20                                   | 4.70                                   |
|                                    | Pueblo      | 5.50                                                  | 6.70                                   | 8.80                                   |
|                                    | Denver      | 6.70                                                  | 8.20                                   | 10.80                                  |
|                                    | Kansas City | 7.20                                                  | 8.70                                   | 13.40                                  |
| A. T. & S. F. R. El Paso....."     | El Paso     | 2.40                                                  | 3.20                                   | 4.70                                   |
|                                    | Pueblo      | 5.50                                                  | 6.70                                   | 8.80                                   |
|                                    | Denver      | 6.70                                                  | 8.20                                   | 10.80                                  |
|                                    | Kansas City | 7.20                                                  | 8.70                                   | 13.40                                  |
| San Antonio....."                  | El Paso     | 2.80                                                  | 3.60                                   | 5.10                                   |
|                                    | Pueblo      | 5.50                                                  | 6.70                                   | 8.80                                   |
|                                    | Denver      | 6.70                                                  | 8.20                                   | 10.80                                  |
|                                    | Kansas City | 7.20                                                  | 8.70                                   | 13.40                                  |
| Magdalena....."                    | El Paso     | 2.80                                                  | 3.60                                   | 5.10                                   |
|                                    | Pueblo      | 5.50                                                  | 6.70                                   | 8.80                                   |
|                                    | Denver      | 6.70                                                  | 8.20                                   | 10.80                                  |
|                                    | Kansas City | 7.00                                                  | 8.50                                   | 13.00                                  |
| El Paso....."                      | El Paso     | 2.60                                                  | 3.20                                   | 4.70                                   |
|                                    | Pueblo      | 5.50                                                  | 6.70                                   | 8.80                                   |
|                                    | Denver      | 6.70                                                  | 8.20                                   | 10.80                                  |
|                                    | Kansas City | 7.00                                                  | 8.50                                   | 13.00                                  |
| Bernalillo....."                   | El Paso     | 3.20                                                  | 4.20                                   | 5.70                                   |
|                                    | Pueblo      | 6.70                                                  | 7.20                                   | 9.20                                   |
|                                    | Denver      | 7.50                                                  | 8.20                                   | 10.80                                  |
|                                    | Kansas City | 8.00                                                  | 9.00                                   | 12.00                                  |
| Wallace....."                      | El Paso     | 3.40                                                  | 4.40                                   | 5.90                                   |
|                                    | Pueblo      | 6.70                                                  | 7.20                                   | 9.20                                   |
|                                    | Denver      | 7.50                                                  | 8.20                                   | 10.80                                  |
|                                    | Kansas City | 8.00                                                  | 9.00                                   | 12.00                                  |
| Los Cerillos....."                 | El Paso     | 3.60                                                  | 4.60                                   | 6.10                                   |
|                                    | Pueblo      | 6.50                                                  | 7.00                                   | 9.00                                   |
|                                    | Denver      | 7.00                                                  | 8.00                                   | 10.00                                  |
|                                    | Kansas City | 8.00                                                  | 9.00                                   | 12.00                                  |
| Flagstaff, A.T. Prescott Jct....." | El Paso     | 6.50                                                  | 8.00                                   | 10.00                                  |
|                                    | Pueblo      | 7.50                                                  | 9.00                                   | 12.50                                  |
|                                    | Denver      | 9.00                                                  | 10.50                                  | 13.50                                  |
|                                    | Kansas City | 9.50                                                  | 11.00                                  | 13.50                                  |
| Peach Spgs " Hackberry....."       | El Paso     | 7.50                                                  | 9.00                                   | 11.25                                  |
|                                    | Pueblo      | 8.00                                                  | 9.50                                   | 13.75                                  |
|                                    | Denver      | 9.50                                                  | 11.00                                  | 15.20                                  |
|                                    | Kansas City | 10.00                                                 | 11.50                                  | 15.20                                  |
| Kingman....."                      | El Paso     | 7.50                                                  | 9.00                                   | 11.25                                  |
|                                    | Pueblo      | 8.00                                                  | 9.50                                   | 13.75                                  |
|                                    | Denver      | 9.50                                                  | 11.00                                  | 15.20                                  |
|                                    | Kansas City | 10.00                                                 | 11.50                                  | 15.20                                  |
| Fenner....."                       | El Paso     | 8.25                                                  | 9.75                                   | 12.75                                  |
|                                    | Pueblo      | 9.00                                                  | 10.50                                  | 15.25                                  |
|                                    | Denver      | 10.50                                                 | 12.00                                  | 16.50                                  |
|                                    | Kansas City | 11.00                                                 | 12.50                                  | 16.50                                  |
| Bagdad....."                       | El Paso     | 8.50                                                  | 10.00                                  | 13.75                                  |
|                                    | Pueblo      | 9.50                                                  | 11.00                                  | 16.50                                  |
|                                    | Denver      | 11.00                                                 | 12.50                                  | 17.25                                  |
|                                    | Kansas City | 11.50                                                 | 13.00                                  | 17.25                                  |
| Daggett....."                      | El Paso     | 9.00                                                  | 10.50                                  | 14.50                                  |
|                                    | Pueblo      | 10.00                                                 | 11.50                                  | 17.00                                  |
|                                    | Denver      | 11.50                                                 | 13.00                                  | 18.00                                  |
|                                    | Kansas City | 12.00                                                 | 13.50                                  | 18.00                                  |
| Barstow....."                      | El Paso     | 9.00                                                  | 10.50                                  | 14.75                                  |
|                                    | Pueblo      | 10.00                                                 | 11.50                                  | 17.25                                  |
|                                    | Denver      | 11.50                                                 | 13.00                                  | 18.00                                  |
|                                    | Kansas City | 12.00                                                 | 13.50                                  | 18.00                                  |
| Kramer....."                       | El Paso     | 9.50                                                  | 11.00                                  | 15.21                                  |
|                                    | Pueblo      | 10.50                                                 | 12.00                                  | 17.71                                  |
|                                    | Denver      | 12.00                                                 | 13.50                                  | 18.37                                  |
|                                    | Kansas City | 12.50                                                 | 14.00                                  | 18.37                                  |
| Mojave....."                       | El Paso     | 10.00                                                 | 11.50                                  | 15.75                                  |
|                                    | Pueblo      | 11.00                                                 | 12.50                                  | 18.25                                  |
|                                    | Denver      | 12.50                                                 | 14.00                                  | 18.80                                  |
|                                    | Kansas City | 13.00                                                 | 14.50                                  | 18.80                                  |
| Canon City....."                   | El Paso     | 2.20                                                  | 2.40                                   | 3.40                                   |
|                                    | Pueblo      | 6.00                                                  | 7.00                                   | 8.00                                   |
|                                    | Denver      | 7.50                                                  | 8.00                                   | 10.20                                  |
|                                    | Kansas City | 8.00                                                  | 9.00                                   | 11.20                                  |
| El Paso....."                      | El Paso     | 2.20                                                  | 2.80                                   | 3.80                                   |
|                                    | Pueblo      | 6.00                                                  | 7.00                                   | 8.00                                   |
|                                    | Denver      | 7.50                                                  | 8.00                                   | 10.20                                  |
|                                    | Kansas City | 8.00                                                  | 9.00                                   | 11.20                                  |
| Las Cruces....."                   | El Paso     | 1.50                                                  | 2.00                                   | 3.00                                   |
|                                    | Pueblo      | 6.00                                                  | 7.00                                   | 9.00                                   |
|                                    | Denver      | 7.50                                                  | 9.00                                   | 11.00                                  |
|                                    | Kansas City | 8.00                                                  | 9.50                                   | 11.50                                  |
| Rincon....."                       | El Paso     | 2.00                                                  | 2.00                                   | 3.00                                   |
|                                    | Pueblo      | 5.50                                                  | 7.00                                   | 9.00                                   |
|                                    | Denver      | 7.00                                                  | 8.50                                   | 10.20                                  |
|                                    | Kansas City | 7.00                                                  | 9.00                                   | 11.00                                  |

by the Railroad Company, at owner's expense, will govern the value and determine the rate.

Agents must shipper to understand the condition upon which these rates are based, and should make their receipts read:

"Rates subject to correction according to value at destination."

These rates only apply on lots of ten tons or over. On lots of four tons and under ten, 20 per cent, and on lots of one ton and less than four, 40 per cent will be added to above rates, except when the rate based on valuation makes it higher, that rates on small lots of high value may not be less than the rates when in lots of one ton or over as above.

Charges on Ore in car-loads must be guaranteed, and on lots less than a car-load must in all cases be prepaid.

**Omaha Rates.**—The Rates to Omaha, Neb., all grades, will be \$1 per ton higher than the rates to Kansas City.

**Note.**—All shipments of Ore and Concentrates valued not to exceed \$50 per ton must be billed at the rate for Ore and Concentrates, "Valuation over \$50 not to exceed \$100 per ton," and shipping receipt must be issued by agent at said rate. Agent at destination is authorized to correct to rate for Ore and Concentrates, "Valuation not to exceed \$50 per ton," upon presentation of properly certified smelter returns, showing that the value does not exceed \$50 per ton.

Intermediate points not named will take rates provided for next station beyond.

## ORE TARIFF.

From Points in New Mexico, Arizona and California, to El Paso, San Francisco and Vallejo Junction.

## SOUTHERN PACIFIC R. R. COMPANY.

| FROM         | TO            | Car Loads, in dollars and cents per ton of 2,000 lbs. |                                        |                                        |
|--------------|---------------|-------------------------------------------------------|----------------------------------------|----------------------------------------|
|              |               | Ore Concentrates.                                     |                                        |                                        |
|              |               | Valuation not to exceed \$50 per ton.                 | Valuation not to exceed \$100 per ton. | Valuation not to exceed \$500 per ton. |
| El Paso, Tex | San Francisco | 7.00                                                  | 9.10                                   | 11.20                                  |
| Deming, N.M. | El Paso       | 2.00                                                  | 2.00                                   | 2.20                                   |
|              | San Francisco | 7.00                                                  | 10.40                                  | 13.20                                  |
| Gage....."   | El Paso       | 2.00                                                  | 2.00                                   | 2.20                                   |
|              | San Francisco | 7.00                                                  | 10.20                                  | 12.80                                  |
| Separ....."  | El Paso       | 2.50                                                  | 2.50                                   | 3.00                                   |
|              | San Francisco | 7.00                                                  | 10.20                                  | 12.60                                  |
| Lordsburg, " | El Paso       | 2.50                                                  | 3.00                                   | 3.60                                   |

# THE PUEBLO Smelting and Refining Company,

PUEBLO, COLORADO.

BUYERS OF

Gold, Silver, Lead and Copper Ores,  
Copper Matte and Bullion.

## Refiners of Gold, Silver, Lead and Copper.

Manufacturers of Bar and Pig Lead, Lead Pipe, Antimonial Lead, Copper Ingots, Granulated Test Leads and Litharge.

Pays Highest Prices for all classes of Ores.

Especial Attention to Sampling by most Approved Processes.

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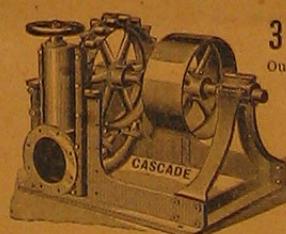
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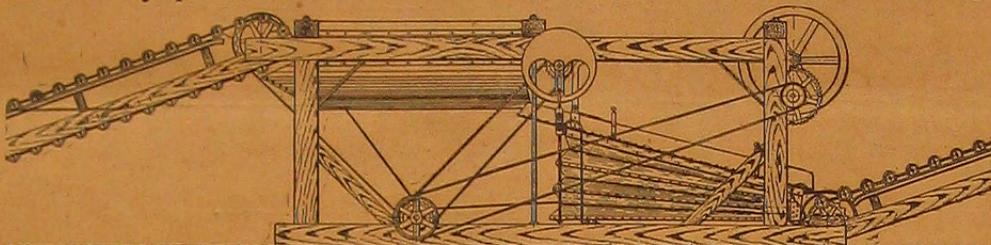
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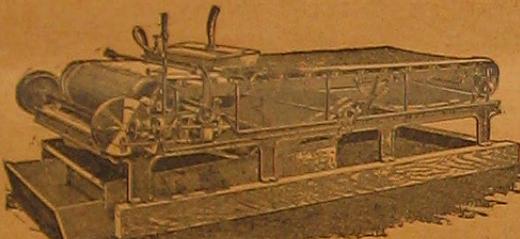
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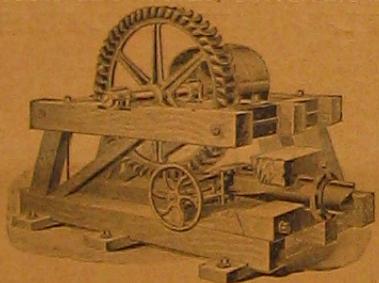
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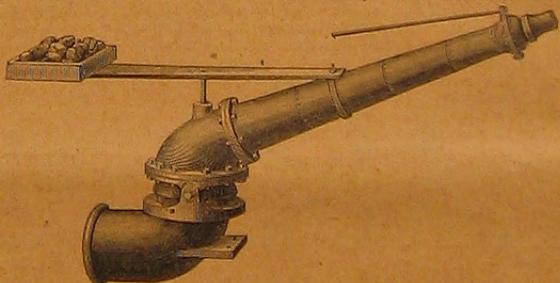
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